

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-18 (Cancelled).

19. (Currently amended) A method for treating liver cirrhosis, comprising administering to a patient in need thereof ~~a~~ an effective dose of IL-6, or a mutein, isoform, fused protein, functional derivative, active fraction, circularly permuted derivative or a salt thereof, optionally together with a pharmaceutically acceptable carrier to treat liver cirrhosis, wherein the dose is in the range of 0.1 to 10 mcg/kg weight.

Claim 20 (Cancelled).

21. (Previously presented) The method according to claim 19, wherein the cirrhosis is compensated cirrhosis.

22. (Previously presented) The method according to claim 19, wherein the cirrhosis is decompensated cirrhosis.

23. (Previously presented) The method according to claim 19, wherein the method of treatment includes liver resection.

Claim 24 (Cancelled).

25. (Previously presented) The method according to claim 19, wherein the dose is about 0.1 mcg/kg or about 1 mcg/kg or about 10 mcg/kg.

Claims 26-27 (Cancelled).

28. (Previously presented) The method according to claim 19, wherein the IL-6, or a mutein, isoform, fused protein, functional derivative, active fraction, circularly permuted derivative or a salt thereof is administered daily or administered once a week or administered three times per week.

Claims 29-30 (Cancelled).

31. (Previously presented) The method according to claim 19, wherein the IL-6 is glycosylated at one or more sites.

32. (Previously presented) The method according to claim 19, wherein the IL-6 is not glycosylated.

33. (Withdrawn) The method according to claim 19, wherein the fused protein comprises an immunoglobulin (Ig) fusion.

34. (Withdrawn) The method according to claim 19, wherein the fused protein comprises IL-6 and gp80 or a fragment thereof.

35. (Withdrawn) The method according to claim 19, wherein the functional derivative comprises at least one moiety attached to one or more functional groups which occur as one or more side chains on the amino acid residues.

36. (Withdrawn) The method according to claim 35, wherein the moiety is a polyethylene moiety.

Claims 37-39 (Cancelled).

40. (Currently amended) A method for treating liver cirrhosis including resection, comprising administering to a patient in need thereof an effective dose of IL-6, a mutein, fused protein, active fraction or circularly permuted derivative thereof, ~~or comprising administering to a patient in need thereof an expression vector comprising the coding sequence of IL-6, a mutein, fused protein, active fraction or circularly permuted derivative thereof or a cell producing the same,~~ to treat liver cirrhosis including resection, wherein the dose is in the range of 0.1 to 10 mcg/kg weight.

41. (Currently Amended) A method for treating liver cirrhosis, comprising administering to a patient in need thereof an effective dose of IL-6, or a mutein, fused protein, active fraction or circularly permuted derivative thereof, ~~or comprising administering to a patient in need thereof an~~

~~expression vector comprising the coding sequence of IL-6, a~~
~~mutcin, fused protein, active fraction or circularly permuted~~
~~derivative thereof,~~ to treat liver cirrhosis, wherein the dose is
in the range of 0.1 to 10 mcg/kg weight.

Claim 42 (Cancelled).

43. (Previously presented) The method of treatment
according to claim 41, wherein the patient in need suffers from
end stage liver cirrhosis.

44. (Previously presented) The method of treatment
according to claim 41, wherein the patient in need suffers from
liver cirrhosis after resective liver surgery.

45. (Previously presented) The method of treatment
according to claim 41, wherein the patient in need suffers from
acute liver cirrhosis.

Claims 46 and 47 (Cancelled).

48. (Previously presented) The method according to
claim ~~46~~ 40, wherein the administration is carried out before
during and/or after resection treatment.

Claim 49 (Cancelled).

50. (Previously presented) The method according to claim 41, wherein the IL-6, or a mutein, isoform, fused protein, functional derivative, active fraction, circularly permuted derivative or a salt thereof is administered daily or administered three times per week or administered once a week.

Claims 51-52 (Cancelled).

53. (Original) The method of treatment according to claim 41, wherein the cirrhosis is severe.

54. (Original) The method of treatment according to claim 41, wherein the cirrhosis is acute.

55. (Currently amended) A method for treating liver cirrhosis followed by engraftment, comprising administering to a patient in need thereof an effective dose of IL-6, a mutein, fused protein, active fraction or circularly permuted derivative thereof, ~~or comprising administering to a patient in need thereof an expression vector comprising the coding sequence of IL-6, a mutein, fused protein, active fraction or circularly permuted derivative thereof,~~ to treat liver cirrhosis, wherein the dose is in the range of 0.1 to 10 mcg/kg weight.

Claim 56 (Cancelled).

57. (Previously presented) The method of treatment according to claim 55, wherein the cirrhosis is severe.

58. (Previously presented) The method of treatment according to claim 55, wherein the cirrhosis is acute.

59(Previously presented). The method of claim 55, wherein the cirrhosis is caused by hepatotoxic agents.

60(Previously presented). The method of claim 19, wherein the cirrhosis is caused by hepatotoxic agents.

61(Previously presented). The method of claim 40, wherein the cirrhosis is caused by hepatotoxic agents.

62(Previously presented). The method of claim 41, wherein the cirrhosis is caused by hepatotoxic agents.